

REMARKS

After entry of this amendment, claims 25, 27–37, and 39–44 will be pending. Claims 26 and 38 have been cancelled, and claims 25 and 37 have been amended to clarify their scope. Support for the amendments may be found in the claims and specification as filed at least at, for example, page 6, lines 8–23. No new matter has been added.

Rejection of Claims Under 35 U.S.C. § 102

Claims 25–27, 30–33, 37–39, 42, and 43 are rejected under 35 U.S.C. § 102(e) as unpatentable over U.S. Patent No. 6,275,544 to Aiello *et al.* (“Aiello”). Aiello appears to disclose a base band receiver apparatus that detects ultra-short spread spectrum pulses and recovers clock and data from the detected pulses.¹ Pulses emitted from a master transceiver 12a to slave transceiver nodes 12b, 12c experience propagation delays t_1 , t_2 .² The different propagation delays t_1 , t_2 may create a different phase offset between the master transceiver 12a and the slave transceiver nodes 12b, 12c.³ Each slave transceiver 12b, 12c includes an offset detector circuit 90 for determining the phase offset – i.e., a delay between a phase-locked local clock and the incoming pulses – by oversampling the incoming pulses to find the location of data header codes 48a–48n.⁴

Aiello does not, however, measure a signal propagation delay of a network-wide time signal between a reference time generator and each of a plurality of nodes and generate a local synchronization signal using the signal propagation delay of a respective node, as required by amended independent claims 25 and 37. Instead, while Aiello notes that different propagation delays t_1 , t_2 exist, Aiello does not measure the delays t_1 , t_2 . Instead, Aiello determines only a phase offset at each slave transceiver node 12b, 12c. The phase offset is determined by simply oversampling the incoming pulse stream and comparing the samples to known synchronization symbols, not by measuring the propagation delays t_1 , t_2 . The phase offset is independent of (and

¹ See Aiello, Abstract.

² See Aiello, column 6, lines 3–9.

³ See Aiello, column 11, lines 46–51.

⁴ See Aiello, column 4, lines 54–57 and column 12, lines 18–23.

not analogous to) the propagation delays t_1 , t_2 because it reflects only the difference between incoming data and a local clock.

Rejection of Claims Under 35 U.S.C. § 103

Claims 28 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aiello in view of U.S. Patent No. 6,591,370 to Lovett *et al.* (“Lovett”); claim 29 is rejected under 35 U.S.C. § 103(a) as being unpatentable over applicants’ admitted prior art; claims 34, 41, and 44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aiello in view of U.S. Patent No. 6,678,781 to Domon (“Domon”); claim 35 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Aiello in view of “Application Critical Parameters for Rubidium Standards” by Weidemann (“Weidemann”); and claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Aiello in view of U.S. Patent No. 6,370,138 to Kim *et al.* (“Kim”).

Applicants respectfully submit that these claims are allowable at least because they depend from allowable independent claims 25 and 27, as amended. Furthermore, the deficiencies of Aiello, as described above, are not cured by Lovett, Domon, Weidemann, or Kim because none of these references teach or suggest measuring a signal propagation delay between a reference time generator and each of a plurality of nodes and generating, at each respective node, a local synchronization signal using the signal propagation delay, as required by amended independent claims 25 and 37.

CONCLUSION

In light of the foregoing, we respectfully submit that all claims are now in condition for allowance.

Enclosed are a petition for a one-month extension of time and authorization to charge the extension fee to Deposit Account No. 07-1700 under reference number BCO-001A. Applicants believe that no additional fees are necessitated by the present paper. However, in the event that any additional fees are due, the Commissioner is hereby authorized to charge any such fees to Deposit Account No. 07-1700.

If the Examiner believes that a telephone conversation with Applicants' attorney would expedite allowance of this application, the Examiner is cordially invited to call the undersigned.

Respectfully submitted,

Date: July 9, 2009
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